

Amendments to the Specification:

Please replace paragraph [0011] of the specification with the following amended paragraph:

- 5 [0011] P_{curr} is pixel data, such as a luminance_value, of the current block being compressed; P_{ref} is pixel data of a search region in the reference frame (such as regions R1-R9, S2-S9, T2-T9 of Fig.2);

Please replace paragraph [0013] of the specification with the following amended paragraph:

- 10 [0013] N, M are the horizontal and vertical sizes of the current block and search regions; and u, v are horizontal and vertical offsets of the search regions of the reference frame with respect to the location current block in the current frame (for region R5, $u = -4$
15 and $v = 0$).

Please replace paragraph [0034] of the specification with the following amended paragraph:

- 20 [0034] A block 72 at the same relative location in the reference frame as the current block 62 in the current frame 60 is selected. The motion vector of this co-located (or coincident) block 72 is designated as potential motion vector P2. Of course, the co-located block 72 need not be in the reference frame 70 provided it is in a frame other than the current frame 60. Additionally, the co-located block ~~[[70]]~~72 should preferably already have its
25 motion vector_determined to prevent redundant calculation.

Please replace paragraph [0047] of the specification with the following amended

paragraph:

[0047] In practical application, the above-described method of determining a motion vector of a current block can be performed by the processor 46 of Fig.3. Instructions executable by the processor 46 that define the method can be stored as the compression algorithm 48 or separately in the RAM 44. The present invention method can be realized ~~with~~realized with hardware and software, the advantages of each dependant on the specific application.

- 10 **Please replace paragraph [0048] of the specification with the following amended paragraph:**

[0048] In contrast to the prior art, the present invention considers motion vectors of proximate blocks, that of a co-located block, and those calculated by predefined search regions to determine a most suitable motion vector for a current block. That is, the present invention ~~method extends~~method extends a motion vector search area to highly probable and already determined locations outside the predetermined regions. In this way, the present invention reduces the chances of the local minimum problem occurring during digital video compression.

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